

Recently “Team California,” led by the 15th District’s own Santa Clara University, placed a third in the U.S. Department of Energy’s 2009 Solar Decathlon. The astonishing part of this achievement is that Team California was the only undergraduate-led team in the competition. The work of this determined team has touched upon a critical issue in our society today - How can we get citizens more involved in the way our country looks at the production, consumption, and conservation of energy? In this regard, I wanted to share a recent Op-Ed I wrote for The Hill with you below and get your thoughts on the topic. I also wanted to show you my statement in the Congressional Record commending the work of Team California.

[[Statement in the Congressional Record](#)]

Shift control from utilities to citizens

This month, United Nations Secretary General Ban Ki-moon and I met to talk about, among other things, climate change. The secretary general has, to his great credit, adopted the issue as one of primary import and will do anything in his power to create consensus among developed and developing countries for a climate commitment in Copenhagen.

The day before my trip to New York, I met with “Team California” in Washington, D.C., one of 20 teams participating in the U.S. Department of Energy’s 2009 “Solar Decathlon.” The Decathlon pits engineering schools in competition for national and international recognition in solar house design. I am proud that Team California, comprised of my district’s Santa Clara University and the Bay Area’s California College of the Arts, placed a competitive third, behind second-place Illinois and first-place Germany.

Team California’s contribution to the climate conversation, however, went far beyond decathlon distinction: I presented the secretary general with a sample of Team California’s “Refract House” in an effort to connect the dots, from innovative design to international development. Needless to say, Ban understood exactly my point.

Ban understood, like the Department of Energy understands, that we must raise awareness about one of the biggest challenges we face — America’s ever-increasing need for energy —

and offer powerful solutions on how we can use energy more efficiently and use energy from renewable sources.

This is essential if we want to democratize energy. The democratization of energy concept calls for a radically different energy infrastructure and market where supply is not controlled by a handful of utilities, but by every individual household. Team California's "Refract House," for example, was entirely energy self-sufficient, generating enough power for all household needs and even capable of selling excess power back to the grid if desired.

This energy self-sufficiency is hardly feasible in most parts of the United States. Consider how centralized our energy system is in the U.S. Most residents have limited options when it comes to energy supply and are often victimized by market forces and fluctuations in prices. The California electricity crisis resulted from a range of reasons: insufficient generating and natural gas capacity, regulation inadequacies, market power abuses, and the general failure to look out for the public's interest.

Thankfully, much has changed in my state of California since the energy crisis, including the call for sustainability by Santa Clara University and the increasing capacity of individuals to generate and sell renewable energy. Many California homes, for example, are now topped with solar panels. The generated power offsets the consumer's monthly electric bill, leaving the user with little to no monthly electricity fees.

This is the way of the future. This is the democratization of energy — putting power, literally and figuratively speaking, into the hands of the people. If America leads, lowering the market price for household-sized renewable energy technologies, other countries will follow because the price will be right. Presently, the price is not possible for many low-and-medium income communities. The "Refract House," for example, cost Team California nearly \$500,000 for labor and materials. For us to scale up and scale out, a lower dollar amount is essential.

Leadership in this area brings economic benefits as well: Companies designing home-appropriate solar panels, wind turbines, geothermal, biomass, or other energy producing devices, can amass majority market share by scaling up, then going global. Our Silicon Valley region is already driving fast and furious toward this goal — exemplified by Santa Clara University's Decathlon efforts — no doubt others are too.

Much like the mobile phone has become ubiquitous in the developing world thanks to the rich world ratcheting down the cost and ratcheting up availability, so too must we replicate this example with other green-tech and energy saving devices like cardboard ovens, wind turbines and micro-solar panels. The mobile phone has contributed much to the developing world, serving as a critical lifeline to banking, agriculture, trade and commerce activities. Think of what portable and affordable devices capable of capturing renewable energy could offer poor and underdeveloped villages. The potential is vast, so too is the need.

By democratizing energy supply here in the U.S. through the opening of markets and the incentivizing of innovative design, we will make it possible for households here in California and households in Calcutta to go green — even when their local or regional utility has yet to convert to renewable sources — because the energy-producing products will be affordable. U.N. Secretary General Ban Ki-Moon and Team California are getting us closer to this goal — now let's just hope that Copenhagen does too.

Original article [here](#) .